

Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed**1.1. Name of the Data, data collection Project, or data-producing Program:**

Maritime Limits and Boundaries of United States of America

1.2. Summary description of the data:

NOAA is responsible for depicting on its nautical charts the limits of the 12 nautical mile Territorial Sea, 24 nautical mile Contiguous Zone, and 200 nautical mile Exclusive Economic Zone (EEZ). The outer limit of each of these zones is measured from the U.S. normal baseline, which coincides with the low water line depicted on NOAA charts and includes closing lines across the entrances of legal bays and rivers, consistent with international law. The U.S. baseline and associated maritime limits are reviewed and approved through the interagency U.S. Baseline Committee, which is chaired by the U.S. Department of State. The Committee serves the function of gaining interagency consensus on the proper location of the baseline using the provisions of the 1958 Convention on the Territorial Sea and the Contiguous Zone, to ensure that the seaward extent of U.S. maritime zones do not exceed the breadth that is permitted by international law. In 2002 and in response to mounting requests for digital maritime zones, NOAA launched a project to re-evaluate the U.S. baseline in partnership with other federal agencies via the U.S. Baseline Committee. The focus of the baseline evaluation was NOAA's largest scale, most recent edition nautical charts as well as supplemental source materials for verification of certain charted features. This dataset is a result of the 2002-present initiative and reflects a multi-year iterative project whereby the baseline and associated maritime limits were re-evaluated on a state or regional basis. In addition to the U.S. maritime limits, the U.S. maritime boundaries with opposite or adjacent countries as well as the US/Canada International Boundary (on land and through the Great Lakes) are also included in this dataset.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:

2002 to 2010

1.5. Actual or planned geographic coverage of the data:

W: 140, E: -60, N: 74.70884, S: -17.555

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
vector digital data

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

Kurt Nelson

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

kurt.a.nelson@noaa.gov

2.5. Phone number:

301-713-2645 x142

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

Tara Wallace

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2011-03-01 00:00:00 - From 2002 to 2010, the interagency U.S. Baseline Committee re-evaluated the U.S. baseline and associated maritime limits as depicted on NOAA charts on a state or regional basis. As a result of this multiple year, iterative project, digital state/regional maritime limits, including the 200nm EEZ, were produced and published in ESRI Shapefile format on NOAA's Office of Coast Survey website. To create a seamless, continuous maritime limits dataset, OCS did the following: 1) transformed the state/regional digital limits, in SHP format, from NAD83 to WGS84; 2) merged the WGS84 SHP files into a single dataset using ESRI ArcGIS and imported into a file geodatabase; 3) segmented the merged limits according to chart symbology groupings as well as feature type (e.g. maritime boundary, maritime limit, or land boundary) to more closely match NOAA charts; and 4) re-attributed the dataset | Source Produced: Merged Digital Maritime Limits and Maritime Boundaries (Citation: Regional Digital Maritime Limits and Maritime Boundaries)
- 2011-03-01 00:00:00 - The coordinates of US/Canada international boundary were obtained from International Boundary Commission in NAD83 and saved into a text file. A point shapefile was created based on the text file in NAD83 and then transformed to WGS84. Polygons were constructed using the point shapefile. All polygons were constructed as rhumb lines, except the following three portions: 1) line segment from 43.631127N, 76.796687W to 43.631127N, 78.690388W; 2) line segment from 41.676561N, 82.397473W to 41.676561N, 82.679716W; 3) line segment in Gulf of Maine ruled by ICJ. These three portions were constructed as geodesic lines. The polygons were segmented according to the grouping of published coordinates on IBC website. New attributes were created and the polygon was attributed. | Source Produced: US/Canada international Boundary (Citation: Geographical Positions along the International Boundary (NAD83))
- 2010-01-01 00:00:00 - US/Canada international boundaries generated in the second process step were imported into file geodatabase and merged with maritime limits generated in the first process step. Topology rules were established in the file geodatabase to detect overlapping, self-intersecting, and dangling polygon features. Any topological errors flagged by topology check were investigated and corrected when necessary. When a polygon feature spans across +/-180 longitude, ESRI clips the feature at the longitude, resulting in dangling polygon. Topology errors as a result of clipping at 180 longitude were marked as exception. Other topology errors

were corrected. The dataset was exported as a shapefile. | Source Produced: US Baseline Committee Approved Maritime Limits and Boundaries (Citation: Merged Digital Maritime Limits and Maritime Boundaries)
- 2013-01-01 00:00:00 - Maritime limits and boundaries are updated using the most recent edition, largest scale nautical charts. Updates are triggered by a new chart edition, or by a formal request to re-evaluate the baseline. Charts are used as a backdrop in the ESRI ArcMap environment to create vector shorelines and lines closing the entrances to legal bays, rivers, and harbors. These lines are imported to the Caris LOTS environment. The "Envelope of Arcs from normal baselines" tool is applied to vector shorelines, and the "Envelope of Arcs from straight baselines" tool is applied to closing lines. As input to the tools, OCS selects the limit distance in nautical miles and designates minimum attributes for the baseline points. The tool generates the contributing baseline points and the boundary limit using a wagon-wheel filtering process of rolling a circle with a diameter specified by the limit distance and choosing the seaward-most points along the low water line. Previously approved limits are manually intersected and replaced with the revised limits to create seamless, revised limit lines. Caris generated EOA control lines, which display how baseline points contribute to particular arc segments of the limit line, are used to inform the manual intersect and replace function. The final dataset is exported from Caris to a shapefile in WGS84, and attributed in the ESRI ArcMap environment. (Citation: US Baseline Committee Approved Maritime Limits and Boundaries)

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed

- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:**6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/39963>

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

Office of Coast Survey (OCS)

7.2.1. If data hosting service is needed, please indicate:**7.2.2. URL of data access service, if known:**

http://maritimeboundaries.noaa.gov/arcgis/services/MaritimeBoundaries/US_Maritime_Limits_Boundaries

<http://maritimeboundaries.noaa.gov/downloads/USMaritimeLimitsAndBoundariesKML.kmz>

<http://maritimeboundaries.noaa.gov/downloads/USMaritimeLimitsAndBoundariesSHP.zip>

https://maritimeboundaries.noaa.gov/arcgis/rest/services/MaritimeBoundaries/US_Maritime_Limits_Boundaries

7.3. Data access methods or services offered:**7.4. Approximate delay between data collection and dissemination:****7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:****8. Data Preservation and Protection**

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:**8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:****8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office of Coast Survey - Silver Spring, MD

8.3. Approximate delay between data collection and submission to an archive facility:**8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.